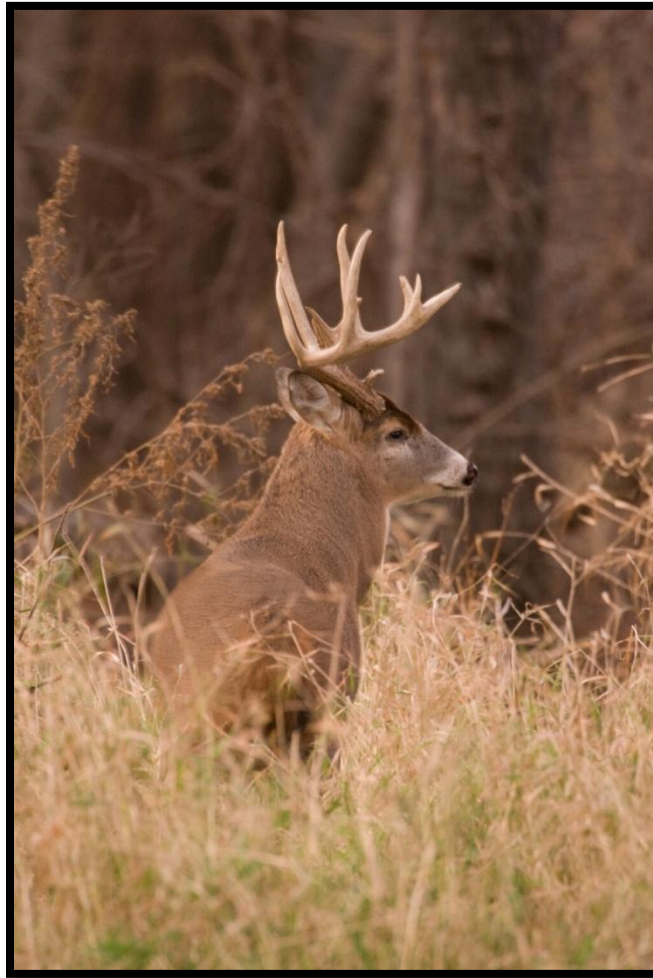


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MISSOURI WHITE-TAILED DEER MANAGEMENT PLAN



MISSOURI DEPARTMENT OF CONSERVATION
(April 7th, 2014)



INTRODUCTION

The white-tailed deer (*Odocoileus virginianus*) is arguably the most important game species in North America. Additionally, the white-tailed deer is both socially and economically important to the citizens of Missouri. As Missouri's most popular game species with diverse citizen interest, the management of the white-tailed deer has a number of unique challenges that range from providing public viewing and hunting opportunities, to minimizing conflicts.

The white-tailed deer management plan was developed to outline the components of Missouri's deer management program and provide strategic direction for deer management in Missouri over the next 10 years. By clarifying the deer management goals and objectives of the Missouri Department of Conservation (MDC), this plan provides an opportunity for critical input from Missouri citizens on the direction of deer management in Missouri. This plan outlines many activities that are already occurring and proposes new concepts to be evaluated during implementation of the plan. It does not outline operational details of the deer management program. Operational details (e.g., proposed regulation changes, research proposals, and work plan adjustments) of plan implementation will be evaluated within a structured decision making framework, and implemented through the appropriate processes.

Previous planning efforts have not been as comprehensive and goal focused as this plan. For example, the most recent 2004 Strategic Deer Plan's primary focus was to manage rapidly growing populations, which at the time was a major challenge of managing Missouri's deer herd. The complexity of challenges to deer management in Missouri continues to increase over time. Existing and future challenges include, but are not limited to: managing deer in urban areas; public versus private land deer management; changing hunter attitudes, preferences, and demographics; changing land use practices; and disease threats such as chronic wasting disease. Ultimately, there is no optimal condition for deer management only a series of alternative strategies that have some predictable and some unpredictable outcomes. Therefore, identifying deer management goals and priorities is a critical first step in establishing the foundation for the future of deer management in Missouri.

This plan outlines four primary goals that incorporate the current priorities for deer management in Missouri: 1) Proactively manage for balanced deer populations below the biological and social carrying capacity within the defined management units at levels acceptable for agriculture, ecosystems, and other impacts consistent with the deer population, and recreational goals; using science-based wildlife management practices; 2) Provide opportunities for all citizens to enjoy deer-related recreational activities, and promote deer hunting as a socially and culturally important tradition that is the primary tool to achieving the deer population goal; 3) Ensure the maintenance of a healthy deer population, and minimize the threat and impacts of diseases on the deer populations in Missouri; 4) Provide information to the public about all aspects of deer biology and management in Missouri, and create opportunities for additional public engagement in the decision making process regarding the management of Missouri's deer resource.

MISSOURI DEER MANAGEMENT PROGRAM REVIEW

In preparation for the development of the white-tailed deer management plan a thorough review of existing information, identification of management challenges and assessment of the current status of white-tailed deer management in Missouri was conducted. A summary of that information can be found within the *White-tailed Deer Management Program Review*.

DEPARTMENT DEER PROGRAM MISSION STATEMENT

The mission of the deer program is to use science-based wildlife management to maintain biologically and socially balanced deer populations throughout the state that provide recreational opportunities, and minimize human-deer conflicts and the potential for negative impacts on ecosystem health.

GOALS AND OBJECTIVES

The *Missouri White-tailed Deer Management Plan* has been developed to provide long-term strategic goals that direct management of the white-tailed deer in Missouri. This plan presents a series of goals, objectives, and strategies for managing Missouri's deer herd in the future. The goals of this plan should remain relatively constant over time; however, objectives and strategies may need to be altered periodically as conditions change and new challenges arise.

Goal 1: Deer Population Management – Proactively manage deer populations for a balanced sex and age structure while maintaining densities at or below the biological and social carrying capacity within the defined management units using science-based wildlife management practices.

The white-tailed deer is highly valued by the citizens of Missouri; however, conflicts between deer and humans as a result of agricultural damage, deer-vehicle collisions, landscaping damage, and suppression of forest regeneration do occur. MDC attempts to minimize the negative impacts of deer by keeping deer populations at acceptable levels and providing landowners and communities a diversity of lethal and non-lethal alternatives to mitigate damage risk.

It is important for a deer management plan to define management units and to propose measures to assess current status of the population. A plan should also propose population management objectives, management strategies to achieve the management objective, and a method to monitor population response. Ultimately, there can only be three desired deer population management objectives: increasing the deer population, maintaining the population, or reducing the population. Therefore, management unit population status can be simply stated as having too many deer, about the right number of deer, or too few deer.

The challenge in establishing population management objectives is balancing social and biological demands given that there are variable deer densities, habitat conditions, and stakeholder attitudes toward deer within and among management unit. Any method for establishing population management objectives should give consideration to all potentially affected interests within the management unit. In the end, public attitudes toward deer and perceptions of the population will determine the success or failure of the deer management program in Missouri.

Recreational hunting is the preferred method for managing deer populations and the associated deer-human conflicts. However, traditional hunting practices may not always be feasible or effective. Therefore, maintaining alternatives to traditional management for mitigation of damage is critical to ensuring that the public continues to place a high value on deer in Missouri.

Objective A – Establish deer population management objectives for each management unit (e.g., county or aggregate of counties in urban areas) with consideration to available habitat, recreational demand, and the potential for deer-related damage

Objective B – Annually assess and monitor deer populations within each management unit using science-based techniques

Objective C – Establish effective harvest guidelines for management of deer on both public and private lands within each deer management unit to meet population management goals

Objective D – Develop or continue programs for localized deer management within a management unit (e.g., conservation areas, cooperatives, communities)

Objective E – Provide flexible and innovative management tools and/or opportunities for communities, hunters, and landowners to achieve localized deer management objectives while meeting overall population management goals

Objective F – Increase effectiveness and management of deer populations in urban and suburban communities.

Objective G – Determine ecosystem impacts of deer and manage deer populations within levels that ensure maintenance of biologically diverse ecosystems

Goal 2: Hunting and Recreation – Provide opportunities for all citizens to enjoy deer-related recreational activities, and promote deer hunting as a socially and culturally important tradition that is the primary tool to achieving population and conflict management goals.

White-tailed deer hunting has become an important part of Missouri's wildlife conservation heritage and modern day traditions. In 2012, more than 517,000 individuals in Missouri possessed some form of a deer hunting permit. Additionally, Missouri deer hunters annually spend more than seven million days hunting and had total annual expenditures of more than \$800,000,000.

Deer hunting is the primary tool that MDC utilizes to manage deer populations. Therefore, proper application of this management tool is critical to meeting deer population goals. Additionally, there is a great deal of tradition associated with Missouri's deer hunting seasons; however, a cultural shift in the expectation of the hunting experience is occurring, with an increasing desire among hunters to see, and have the opportunity to harvest more older age class bucks. However, many deer hunters still want the opportunity to harvest any legal deer. Additionally, to achieve the deer population management goals and maintain high levels of public satisfaction with the deer management, the desires of all user groups must be understood.

Objective A – Establish deer hunting season structure and regulations that achieve the deer population management goal and promote hunter participation, recruitment, retention and satisfaction

Objective B – Continue to promote recreational hunting as the primary tool to manage deer population

Objective C – Create a simple regulatory system that ensures fair and equitable allocation of hunting opportunities (e.g., seasons, methods, and permits) on private lands

Objective D – Provide satisfactory hunting opportunities on public lands

Objective E – Facilitate better deer hunting opportunities on private land

Goal 3: Deer Health and Disease – Ensure the maintenance of a healthy deer population and minimize the threat and impacts of disease on the deer populations in Missouri.

The Missouri Department of Conservation is responsible for ensuring the health of the deer population through management and regulation. Like all wildlife species, the white-tailed deer is susceptible to a number of diseases and parasites. The periodic occurrence of hemorrhagic disease (epizootic hemorrhagic disease and blue tongue), and the recent introduction of chronic wasting disease (CWD) to Missouri have raised public concerns regarding the short- and long-term impacts of diseases on the health of Missouri's deer population.

Chronic wasting disease, once established within a deer population, poses a significant threat to the long-term health and size of the state's deer herd. The emergence of CWD in Missouri not only jeopardizes the health of Missouri's deer population, it is also a long-term threat to the state's hunting heritage. Management actions to minimize the impact of CWD within our deer herd and efforts to reduce the spread and risk of future introductions require immediate attention.

The MDC management response must give consideration to the level of risk any disease poses to the health of the deer herd, other wildlife, livestock, and humans. Identification and monitoring of diseases of concern coupled with development of contingency plans to deal with current and emerging disease risk will be beneficial in addressing current and future disease management challenges.

Objective A – Conduct monitoring of deer herd health and implement surveillance programs for diseases that pose a significant risk to the deer population

Objective B – Implement policies and regulations to prevent the infection of deer by diseases not currently established in Missouri, and reduce the prevalence of diseases already established

Objective C – Minimize risks from diseases that impact multiple species, such as wildlife, humans and livestock.

Goal 4: Education, Communication, and Public Engagement – Provide abundant and adequate information to the public about all aspects of deer management in Missouri, and create opportunities for additional public engagement in decisions about the management of Missouri deer resource.

The public is very interested and directly affected by all aspects of deer management. Additionally, any discussion of deer hunting or management is likely to elicit a strong response. Public opinions and philosophies often stem from traditions, long-held ideals, and biases that may be difficult to change. Because of the diversity of stakeholders affected by deer management, it is critical that effective communication and engagement be a priority to ensure the long-term success of the deer management program. It is widely recognized that engaging large diverse groups of stakeholders is extremely difficult, and development of educational materials that clearly communicate management strategies is no simple task. Therefore, MDC must implement a clear strategy to engage the public, key stakeholders, and partner organizations to proactively address management issues.

Objective A – Clearly and effectively communicate deer management strategies to all stakeholders

Objective B – Ensure stakeholder engagement in deer management decisions and clearly communicate outcomes.

Objective C – Continue to coordinate with partners to provide science-based deer management information and implement educational outreach programs

Objective D – Continue to value and promote the role of the private landowner and landowner cooperatives in the management of Missouri's deer herd

Please provide your thoughts and comments about the Deer Management Plan.

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